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ORIGINAL ARTICLE

Locked out: An ethical analysis of Trinidad and Tobago's COVID-19 border closure



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Summary

Background. — The COVID-19 pandemic has forced nearly every nation around the world to implement border restrictions, some of which have prevented citizens from entering their own country. Restricting access to one's own country was a burdensome intervention, but may have been necessary given the global emergency. Thus, the decision restrict citizens' entry as a public health intervention warrants ethical analysis to determine its appropriateness. The focus of this paper is on the ethics of the 15-month border closure implemented in Trinidad and Tobago during the COVID-19 pandemic.

Methodology. — Ethical analysis of the COVID-19 border closure in Trinidad and Tobago was done using a six-part ethical framework for public health.

Discussion. — The ethical analysis highlights various areas of concern which question the justification for the border closure. The effectiveness, necessity and proportionality of the intervention were justified in the short-term, however, as benefits diminished over time, this did not result in appropriate policy changes. Continuous evaluation of the intervention throughout its use could have improved the balance of benefits and burdens thereby providing stronger ethical validation.

Conclusion. — The COVID-19 border closure in Trinidad and Tobago brought substantial burdens upon its citizens without comparable benefits. Data from previous pandemics and the best available data during the current pandemic showed that effectiveness was limited to the initial months, after which it would have been unnecessary to maintain. Thus, the government's decision to prolong the border closure for 15 months, well past its time of effectiveness, was not ethically justified from our analysis.

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Introduction

In early 2020, the COVID-19 pandemic brought much of the world's movement to a halt. Many aspects of the disease were not well understood at the time however, being a viral respiratory illness, general practices such as quarantine, isolation and *cordon sanitaire* were being implemented. Countries began taking measures to reduce entry and minimize spread of SARS-CoV-2, with over 150 nations imposing restrictions at international borders. Some nations allowed essential travel only, some remained open to returning citizens or permanent residents while others closed off to the outside world completely. The Government of The Republic of Trinidad and Tobago (GORTT) implemented a complete border closure that restricted travel both into and out of the twin island state. This action was initiated on March 23rd, 2020 and continued to July 17th, 2021.

While this intervention was considered by many to be reasonable at its inception, its acceptance by the population diminished over time. This prompted some citizens to seek legal action against the state, arguing that the restriction deprived them of their constitutional right of entry to their own country. The nation's High Court, however, upheld the government's stance. It was ruled that the border closure was an appropriate response in light of the pandemic and was proportional to the risks incoming citizens may pose to the nation [1]. Furthermore, the Public Health Ordinance that provides the legal authority for interventions during a disease outbreak is considered saved law, and therefore not subject to constitutional challenge [1].

Though the actions of the government in this regard may be safe from legal challenge, ethical concerns remain. The decision to prevent citizens from returning to their own country during a global pandemic may have placed those citizens at significant risk of harm and distress while increasing economic hardships on those locally. At the same time, it may have been unavoidably necessary to do so to protect those already within the nation's borders. Thus, a public health intervention that infringes on constitutional rights and potentially places increased burdens on its citizens demands further consideration.

In this paper, we aim to explore the ethical implications of the COVID-19 border closure in Trinidad and Tobago (T&T) as a public health intervention. Using a public health ethics framework as an analytical tool, we seek to draw conclusions about the ethical justification of the border closure. These outcomes may have implications on both public health practice and policy making in T&T, with potential impacts on the legal standing of such actions as well.

Trinidad and Tobago's Border Closure Regulations

On March 17th, 2020, the GORTT initiated its first travel restrictions, barring all non-nationals from entry into the country. This was updated on March 21st, 2020 when it was announced that there would be a total closure of all air and sea ports for international travel from March 23rd, 2020. Citizens desiring entry into and out of the country after that required an exemption from the Minister of National

Security as provided by the law, though no specific guidelines on how to obtain this were outlined until June 3rd, 2020. Additionally, the criteria used to grant exemptions was not made available to the public until July 2020 after a lawsuit requesting its disclosure was filed against the state [2].

By January 2021, 19,941 exemption applications were made with 11,682 granted, though the number of exemptions granted does not reflect the number of citizens that were able to return to T&T [3]. The time frame from exemption application to approval or denial was not specified and can range from days to months. There was also no published data on the number of persons who applied to leave T&T but were not granted permission to do so.

It is difficult to estimate the true extent of the impact the border closure had on persons wanting to travel. There may have been additional factors that cannot be accounted for such as the proportion of persons that could not travel due to costs associated with flights, quarantine and testing. Another influential factor was the uncertainty about being able to leave the country again after exemption approval and entry or vice-versa.

Ethical Analysis

We adopt the "Ethics in public health framework" developed by N. Kass (2001) [4] as the analytical tool for examining the border closure in T&T. This framework utilizes six, step-wise questions in its approach:

- What are the public health goals of the program?
- How effective is the program in achieving its stated goals?
- What are the known or potential burdens of the program?
- Can burdens be minimized? Are there alternative approaches?
- Is the program implemented fairly?
- How can the benefits and burdens of a program be fairly balanced?

Though these questions are framed to be used in the development of public health interventions, prior to their implementation, we apply the principles of each question retrospectively.

What are the public health goals of the program?

The main public health goal of the border closure was to protect the public from viral entry and transmission. Through the border restrictions, the GORTT aimed to mitigate or prevent the entry of imported cases of the disease into the country, reduce infection risk, decrease the burden of disease on the local population and avoid the potential of health care systems becoming overwhelmed. Ultimately, it sought to reduce the morbidity and mortality of the disease on the population.

How effective is the program in achieving its stated goals?

At the time of its implementation, there was limited data available on the effectiveness of border closures on COVID-19 spread. However, previous pandemic data and

mathematical models could have been used to estimate efficacy in the earlier part of the pandemic.

Systematic review of data from human influenza showed international travel restrictions have limited impact on pandemic spread, as they only delay spread of disease by 3-4 months, with minimal reductions in reproduction rate [5]. While it is noted that such delays may allow for the establishment of other interventions such as resource procurement and vaccinations, they have not been shown to reduce the overall disease peak [5]. In the absence of data on COVID-19, previous influenza pandemic data could have been used as a potential model early in the current pandemic due to similarities in viral transmission. When more data on virus spread was gathered, mathematical models and observational studies were available and could have been used to examine the effectiveness of border closures. Though modelling studies generally provide a low-level of evidence, systematic review of the available studies showed a high level of agreement that the greatest effects of border closures were in the early part of the pandemic but have limited effects on reducing disease burden later on [6], especially in the context of high community spread [7].

As more data became available, observational studies from other regions as well as epidemiological data from the local setting could have been used to measure effectiveness. Epidemiological data from T&T as early as July 2020 showed that local infection rates were high, with viral reproduction rates crossing 2 in August 2020 [8]. High viral reproduction rates indicate high rates of community spread, and in that context, border restrictions have limited impacts on further community spread [9]. While it may have prevented new imported cases, the overall effect of this on the general population would likely have been limited, particularly during periods of high local transmission [7].

An additional factor that should have been considered with respect to program effectiveness was the influx of Venezuelan migrants at unchecked borders. Due to the humanitarian crises in neighbouring Venezuela, there has been ongoing migration to T&T during the border closures through unchecked ports of entry. This migration was shown to be the source of the P1/gamma variant's entry into the local community, now believed to be one of the predominant strains on island [10]. The border closure therefore, had little effect on the entry of Venezuelans onto the island, which further contributed to its limited effectiveness.

What are the known or potential burdens of the program?

The most obvious burden of the intervention was the restriction on liberty and self-determination. Citizens have the right to freedom of movement under the constitution and international human rights codes. Though these rights are not absolute, as circumstances may warrant their temporary suspension, it was a significant restriction that had both short and long-term negative outcomes. Restrictions on liberty impacted income, through loss of business or work [11], personal travel for medical treatment was affected, and the ability to care for sick relatives or fulfill other family commitments was hindered.

Concerning justice, there were issues specifically related to those citizens who were outside of the nation's borders. Preventing the entry of citizens to their own country during a global pandemic places those citizens at risk for harm; they may have been without food, shelter or finances for an indefinite period of time. These resource limitations likely had negative health impacts which necessitated medical care. Some may have been hesitant to seek care due to healthcare costs, while others may have been refused care, or receive limited care from the inability to pay. Being trapped aboard has been shown to increase levels of anxiety and depression [12]. Conversely, those at home were less likely to face these challenges, highlighting the inequalities created by the intervention.

On a national level, there were economic costs associated with the border closure. These were related to the loss of revenue from investment, international travel, reduction in trade and other associated industries [13]. These effects, although experienced by all citizens, likely impacted the poor disproportionately.

Can burdens be minimized? Are there alternative approaches?

The burdens produced as a result of the intervention were complex and in some respects unavoidable for the intended purpose. As stated, the early months of the pandemic had the greatest opportunity for benefit from border closures, thus, alternatives to minimize these burdens during this period may have been limited. Beyond that time, however, burdens could have been minimized with a reduction in duration of the border closure. A shortened border closure could have been followed by a risk-based approach which considers multiple risk factors and mitigation steps that aim to reduce transmission while reducing restrictions on international travel [14]. Such action would have reduced the burdens associated with the intervention while having a similar overall effect on local transmission rates.

Though the GORTT employed an exemption process to permit some travel into and out of the country, there were still major limitations in access. Assuming one were to get an approved exemption, there were no commercial flights to the islands due to the border closure. Citizens relied on occasional repatriation flights by the state-owned airline or private charters. The cost of these flights were markedly more expensive than average commercial airline seats, thereby limiting travel only to those who could afford the increased costs. There was also a mandatory 14-day quarantine for all returning nationals, which could be done at a state facility for free, or at a state-supervised hotel where payment was required. The ability to pay for quarantine at a hotel would significantly improve the chances of being granted an exemption due to the limited spaces in the state facilities. Thus, these measures were not effective burden-minimizing alternatives as poorer citizens would have been disproportionately affected.

Is the program implemented fairly?

Preventing citizens from returning home for a prolonged period likely placed them at an increased risk of harm due to disease exposure and may have impacted their ability to access healthcare. Those within T&T borders, though experiencing some negative effects of the intervention, were not affected as substantially. Thus, the border closure disproportionately placed the burden of the intervention on those citizens who were 'locked out' of the country while receiving no benefits from that action.

Another factor affecting the fairness of the intervention was in relation to the exemption policy for reentry. As previously mentioned, persons who wanted to gain entry during the border closure required an exemption. From the time of its enactment, the exemption process raised numerous questions from the public regarding its fairness. For example, the government permitted the entry of sporting teams for an international tournament during the border closure. justifying it based on revenue generation while many citizens were still waiting for approval [15]. Parliamentarians and their families were also granted exemptions on short notice, further raising questions about the fairness of the process. One of the most controversial entry exemptions was for a Venezuelan politician who was subject to numerous international sanctions for human rights violations, of which T&T was bound to maintain [16]. A few days prior to her allowance, a group of T&T nationals who were unable to arrive before the border closure's implementation were denied entry. Though it may be difficult to draw concrete conclusions on how objectively the process was executed, these actions of the GORTT contributed to a perception of bias among the population [17].

How can the benefits and burdens of a program be fairly balanced?

Fair balance of benefits and burdens requires transparency, accountability and public input, as a form of procedural justice [18]. Due to the time-sensitive nature of the intervention, it was not feasible for the GORTT to carry out any programs for public involvement in advance. However, the inability to involve the public in the decision making prior to implementation should not have prevented discussion afterward. Policies regarding entry during the period of border closure as well as target goals for discontinuation of the closure were not communicated openly and there were limited avenues for discussion with the government on the issue. Transparency on the matter was also questionable as the GORTT did not freely disclose the exemption criteria; this was released after legal action was taken against the state.

Discussion

Public health interventions that are burdensome, such as those that restrict citizens' basic rights, demand reliable data and continuous evaluation to determine its proportionality and necessity [18]. Our analysis suggests that the GORTT did not undertake thorough ethical inquiry as required by such restrictive measures. This likely contributed to the lengthy duration of the measure which led to an imbalance of benefits and burdens.

One of the key points raised in the Ethical Analysis above is related to the effectiveness of the intervention. At the time of the border closure's implementation, there was inadequate data on the impact such an action would have on

SARS-CoV-2 spread. In that context, it was appropriate for the government to maintain the border closure as a precautionary measure until more evidence was presented. Within the first 3 to 4 months, it was clear that the intervention was effective in delaying a local outbreak and thus ethically justified for that period. However, we believe that sufficient evidence was likely available 6 to 9 months into the border closure that showed diminishing impact of the intervention; by July 2020 there was considerable community spread and in August, viral reproduction rates in T&T were the highest in the world [8]. Additionally, the WHO released guidelines on how to implement a risk-based approach to international travel by December 2020, 9 months into the border restriction [14]. The GORTT had an effective alternative to the total border closure through the application of this risk based approach. We believe this to be a tipping point in the ethical justification for the intervention where there was a gradual shift from ethical to unethical as benefits decreased while burdens remained. Continuing such restrictions on citizens' constitutional rights in the context of limited effectiveness while having alternative approach options renders them unnecessary, disproportional and therefore, unethical in response to the public health risks.

This issue of necessity and proportionality also brings into question the legal justification of the suspension of constitutional rights. Based on the evidence presented above, we disagree with the position of the T&T High Court that the extended border closure was a proportional response, at least in its duration. Under the current system of law in T&T though, there is no outlet for legal challenge to actions taken under the Public Health Ordinance. Essentially, the government is free to deprive citizens of constitutional rights provided it believes that such actions are justified in the interest of public health. Our analysis shows that the actions of the government here were not justified in its entirety but could not be challenged in court. This should therefore prompt lawmakers to revisit and revise the current Ordinance as failure to do so may result in future, avoidable violations of human rights in the name of public health.

Another issue that raised ethical concerns was public perception. Trust is an integral part of any public health policy as it reduces burdens and ultimately improves outcomes. It is expected that policies as restrictive as border closures will not be agreed upon by all. However, there is a duty to justify those actions with evidence, and to communicate the circumstances necessary to bring about a return of one's rights. While there was often talk about reopening the borders, even as early as May 2020, no clear targets that needed to be met were communicated. The government reiterated that the border closures were necessary based on the epidemiological data but did not adequately engage in public discussion on what that data was, or how changes in that data may affect future decisions. Similarly, the implementation of the exemption process did not improve public perception and trust in the program. Though the GORTT maintains that the exemption process was transparent and fair, the fact that legal action was necessary for the disclosure of the policy challenges that claim. The perceived inconsistencies in the exemption policy's implementation resulted in many citizens feeling abandoned in another country by the state [19].

Conclusion

The GORTT took a firm stance, being one of the few nations to implement stringent border closures for such a lengthy period during the COVID-19 pandemic. Though this action was justified in the early months of the pandemic, its extended duration provided limited benefits. When considered in light of the numerous burdens imposed by this restriction, we conclude that the extended duration of the border closure was not ethically justified. We believe there was sufficient evidence available within 9 months of its implementation to modify the border restrictions and appropriately limit its duration while employing other mitigation measures. Additionally, the lack of public discussion and issues of fairness with the exemption process did not improve public trust, further increasing burdens on the citizenry. Had these issues been adequately addressed, this likely would have led to a better balance of benefits and risks. These findings emphasize the temporal dimension of ethical issues and highlight the importance of continuous assessment and evaluation of rights-limiting public health interventions so as to reduce the burdens placed on citizens.

Human and animal rights

The authors declare that the work described has not involved experimentation on humans or animals.

Informed consent and patient details

The authors declare that the work described does not involve patients or volunteers.

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Author contributions

All authors attest that they meet the current International Committee of Medical Journal Editors (ICMJE) criteria for Authorship.

Disclosure of interest

The authors declare that they have no competing interest.

References

- [1] Loutoo J. Court upholds Government's closed-border policy. Trinidad and Tobago Newsday; 2021 [cited 2021Sep27]; Available from: https://newsday.co.tt/2021/03/30/court-upholdsgovernments-closed-border-policy/.
- [2] Achong D. Ministry releases criteria for COVID exemptions after lawsuit. Trinidad and Tobago Guardian [Internet]; 2020 [cited 2021 Sep 27]. Available from

- https://guardian.co.tt/news/ministry-releases-criteria-for-covid-exemptions-after-lawsuit-6.2.1167652.09e18f83ca.
- [3] La Vende J. Young: No more Trinis stuck outside borders. Trinidad and Tobago Newsday [Internet]; 2021 [cited 2021 Sep 26] Available from: https://newsday.co.tt/2021/02/03/young-no-more-trinis-stuck-outside-borders/.
- [4] Kass NE. An ethics framework for public health. Am J Public Health 2001;91:1776–82, http://dx.doi.org/10.2105/ajph.91.11.1776 [PMID: 11684600; PMCID: PMC1446875].
- [5] Mateus AL, Otete HE, Beck CR, Dolan GP, Nguyen-Van-Tam JS. Effectiveness of travel restrictions in the rapid containment of human influenza: a systematic review. Bull World Health Organ 2014;92:868–80, http://dx.doi.org/10.2471/BLT.14.135590 [Epub 2014 Sep 29. PMID: 25552771; PMCID: PMC4264390].
- [6] Grépin KA, Ho TL, Liu Z, Marion S, Piper J, Worsnop CZ, et al. Evidence of the effectiveness of travel-related measures during the early phase of the COVID-19 pandemic: a rapid systematic review. BMJ Glob Health 2021;6:e004537, http://dx.doi.org/10.1136/bmjgh-2020-004537 [PMID: 33722793; PMCID: PMC7969755].
- [7] Russell TW, Wu JT, Clifford S, Edmunds WJ, Kucharski AJ, Jit M. Effect of internationally imported cases on internal spread of COVID-19: a mathematical modelling study. Lancet Public Health 2021;6:e12-20, http://dx.doi.org/10.1016/S2468-2667(20)30263-2 [Epub 2020 Dec 7. PMID: 33301722; PMCID: PMC7801817].
- [8] Ritchie H, Mathieu E, Rodés-Guirao L, Appel C, Giattino C, Ortiz-Ospina E, et al. Coronavirus Pandemic (COVID-19) Statistics and Research [Internet]. Our World in Data; 2020 [cited 2021 Sep 27]. Available from: https://ourworldindata.org/coronavirus.
- [9] Burns J, Movsisyan A, Stratil JM, Biallas RL, Coenen M, Emmert-Fees KM, et al. International travel-related control measures to contain the COVID-19 pandemic: a rapid review. Cochrane Database Syst Rev 2021;3:CD013717, http://dx.doi.org/10.1002/14651858.CD013717.pub2 [PMID: 33763851; PMCID: PMC8406796].
- [10] Ghouralal D. Deyalsingh: T&T's first P1 variant case came from Venezuelan migrant. Loop News T&T; 2021 [cited 2021 Sep 26]; Available from: https://tt.loopnews.com/content/deyalsinghtts-first-p1-variant-case-came-venezuelan-migrant.
- [11] Abideen SO. Coronavirus (COVID-19) and the survival of small and medium enterprises in Abeokuta. Ogun State Nigeria. Schol J Economics Business Manag 2020;7:209—14, http://dx.doi.org/10.36347/sjebm.2020.v07i06.002.
- [12] Solomou I, Constantinidou F. Prevalence and predictors of anxiety and depression symptoms during the covid-19 pandemic and compliance with precautionary measures: age and sex matter. Int J Environ Res Public Health 2020;17:4924, http://dx.doi.org/10.3390/ijerph17144924 [PMID: 32650522; PMCID: PMC7400373].
- [13] Klinger C, Burns J, Movsisyan A, Biallas R, Norris SL, Rabe JE, et al. Unintended health and societal consequences of international travel measures during the COVID-19 pandemic: a scoping review. J Travel Med 2021;28:taab123, http://dx.doi.org/10.1093/jtm/taab123 [PMID: 34369562; PMCID: PMC8436381].
- [14] Considerations for implementing a risk-based approach to international travel in the context of COVID-19. WHO; 2020 [cited 2021 Sep 26]. Available from: https://www.who.int/publications/i/item/WHO-2019-nCoV-Risk-based-international-travel-2020.1.
- [15] Taitt R. PM Bats for CPL. Trinidad and Tobago Express [Internet]; 2020 [cited 2021 Sep 26]; Available from: https://trinidadexpress.com/news/local/pm-bats-for-cpl/article_b9a56108-c30f-11ea-aea3-b385fe459f53.html.

- [16] Ramdass A. Delcy subject to sanctions binding on Rio Treaty parties. Trinidad and Tobago Express [Internet]; 2020 [cited 2021 Sep 26]; Available from https://trinidadexpress.com/news/local/delcy-subject-to-sanctions-binding-on-rio-treaty-parties/article_7711ada0-94b7-11ea-881d-bbb6804e9b86.html.
- [17] Webb Y. De Nobriga: Don't begrudge exemption for Khan's daughter. Trinidad and Tobago Newsday; 2021 [cited 2021 Sep 26]; Available from: https://newsday.co.tt/2021/04/23/denobriga-dont-begrudge-exemption-for-khans-daughter.
- [18] Kass NE. An ethics framework for public health and avian influenza pandemic preparedness. Yale J Biol Med 2005;78:239–54 [PMID: 17132331; PMCID: PMC2259154].
- [19] Smith K. Twin-island state's citizens decry border closure. Barbados Today 2021 [cited 2021 Sep 26]; Available from: https://barbadostoday.bb/2021/04/02/twin-island-states-citizens-decry-border-closure.